

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of generating and sending a message from a first entity, the method including the steps of:
 - determining a message including an action;
 - generating an authentication code on the basis of the action and a parameter by first applying a one-way function to the action and parameter and then encrypting the result, the parameter being indicative of an attribute of the action; and
 - sending the message and authentication code from the first entity.
2. (Currently Amended) A method of generating and sending a message from a first entity, the first entity including an identifier that distinguishes it from a plurality of other entities of a similar type, the method comprising the steps of:
 - determining a message including an action;
 - generating an authentication code on the basis of the action and a parameter by first applying a one-way function to the action and parameter and then encrypting the result, the parameter being based on the identifier; and
 - sending the message and authentication code from the first entity.
3. (Original) A method according to claim 1 or 2, wherein the action is a function, and the parameter is indicative of the function.
4. (Original) A method according to claim 3, wherein the entity is capable of generating messages for each of a plurality of types of function, and the parameter is indicative of the type of function comprised by the message that is sent.
5. (Original) A method according to claim 3, wherein the message includes one or more operands of the function.
6. (Original) A method according to claim 5, wherein the function is a read function and the one or more operands include an address to be read.

7. (Original) A method according to claim 5, wherein the function is a write function and the one or more operands include data to be written.
8. (Original) A method according to claim 4, wherein the types of function include at least a read and a write, wherein the authentication step produces a different authentication code depending upon whether the action is a read or a write.
9. (Original) A method according to claim 4, wherein the authentication step produces includes authentication codes
10. (Currently Amended) A method of generating a first authentication code for a first message for a first function, wherein operands for the first ~~authentication~~ function used to generate the first authentication code include at least part of the first message and at least one identifier associated with the first function and the first authentication code is generated by first applying a one-way function to the at least part of the first message and at least one identifier and then encrypting the result.
11. (Original) A method according to claim 10, further including the steps of verifying the authentication code in accordance with the at least one identifier associated with the first function.
12. (Original) A method according to claim 10, wherein the identifier is indicative of a type of the function.
13. (Original) A method to claim 10, wherein the at least one identifier is indicative of the entity generating the authentication code.
14. (Original) A method according to claim 12, wherein the at least one identifier is indicative of an entity for which the authentication code is generated.
15. (Original) A method according to claim 14, including the step, prior to generating the authentication code, of receiving a request from the entity for the first message, the request including information indicative of an identity of the entity.